

TIMOTHY P. MURRAY Lieutenant Governor

COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

SOUTHEAST REGIONAL OFFICE

20 RIVERSIDE DRIVE, LAKEVILLE, MA 02347

(508) 946-2700

IAN A. BOWLES Secretary

LAURIE BURT Commissioner

FINAL AIR QUALITY OPERATING PERMIT

(Amended copy dated 1/3/13)

Issued by the Massachusetts Department of Environmental Protection (MassDEP) pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

ISSUED TO ["the Permittee"]:

Taunton Municipal Lighting Plant 55 Weir Street P.O. Box 870 Taunton, Massachusetts 02780

FACILITY LOCATION:

Cleary-Flood Station 1314 Somerset Avenue Taunton, Massachusetts 02780

NATURE OF BUSINESS:

Fossil-Fuel Fired Steam Electric Generation Plant

RESPONSIBLE OFFICIAL:

Name: Mr. Michael J. Horrigan Title: General Manager

INFORMATION RELIED UPON:

Application No. 4V08055 Transmittal No. X224279

(Includes):

Admin. Amendment No. SE-12-049, Transmittal No. X254066

FACILITY IDENTIFYING NUMBERS:

AQ ID: 1200067 FMF FAC NO. 130277 FMF RO NO. 54238

STANDARD INDUSTRIAL CODE (SIC):

4911

NORTH AMERICAN INDUSTRIAL CLASSIFICATION SYSTEM (NAICS):

221112

FACILITY CONTACT PERSON:

Name: Mr. Michael J. Horrigan Title: General Manager Phone: (508) 824-5844

This operating permit shall expire on June 3, 2015.

For the Department of Environmental Protection, Bureau of Waste Prevention

(Amended copy dated 1/3/13) (Operating Permit signed June 3, 2010)

Chief, Permit Section Date

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057. TDD# 866-539-7622 or 617-574-6868.

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SPECIAL CONDITIONS FOR OPERATING PERMIT

A Legend to Abbreviated Terms found in the following Tables is located in Section 28 of the Operating Permit.

1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00: Appendix C, and applicable rules and regulations, the permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00: Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6, and to other terms and conditions as specified in this permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this permit.

DESCRIPTION OF FACILITY AND OPERATIONS

Taunton Municipal Lighting Plant (TMLP) is a municipal power production facility located on Somerset Avenue in Taunton, Massachusetts. The facility is known as Cleary Flood Station, and produces a maximum of 140 megawatts (MW) to the electric utility distribution grid. Cleary Flood Station is a dispatch-type facility where operation is solely demand-based.

Power generation equipment includes two boilers (Emission Units No. 8 and 9) and one combustion turbine (Emission Unit No. 9A). Emission Unit No. 8 is capable of producing 300,000 pounds per hour of 920 psig steam at approximately 900°F. This steam is fed to a steam turbine capable of producing up to 28.3 MW of electrical power.

Emission Unit No. 9 is capable of producing 557,000 pounds per hour of 1,875 psig steam at approximately 1,000°F. This steam is fed to a steam turbine capable of producing up to 90.0 MW of electrical power. This boiler can be fresh air-fired or fired using the combustion turbine exhaust as its combustion air source.

Emission Unit Nos. 8 and 9 commenced construction prior to August 17, 1971, so neither is subject to 40 CFR 60, Subpart D.

Emission Unit No. 9A is capable of generating up to 24.0 MW of electrical power.

Other emission units include two boilers (Emission Units No. 8A/H and 9A/H) used for space heating, and a starter diesel engine (Emission Unit No. SD) used with the combustion turbine for normal-start and black-start situations.

Ancillary equipment at the facility includes the storage tanks, various vents, and a cooling tower. tower.

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Emission Unit Nos. EU-8 and EU-9 are subject to and shall comply with the Massachusetts Clean Air Interstate Rule (CAIR) under 310 CMR 7.32 and has submitted a BWP AQ29 CAIR permit application (Transmittal No. W154955) pursuant to 310 CMR 7.32(3). Upon approval of the submitted CAIR permit application, the permittee shall submit a BWP AQ10 Minor Modification application to incorporate the requirements into this Operating Permit.

None of the emission units at the facility are subject to the requirements of 40 CFR 64, <u>Compliance Assurance Monitoring</u> since they do not employ control devices to achieve compliance with emission limits.

The facility is not a major source of hazardous air pollutants (HAP).

2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this operating permit:

	Table 1				
Emission Unit (EU)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)		
EU-8	Boiler No. 8 Combustion Engineering Model No. VU-60 (to Stack No. 8)	398,000,000 Btu/hr	Nana		
EU-9	Boiler No. 9 Riley Stoker Model No. ISR-22 (to Stack No. 9)	Riley Stoker Model No. ISR- 22 None 1,034,000,000 Btu/hr			
EU-9A	Combustion Turbine No. 9A General Electric Model No. MS-5001 (to Stack No. 9)	300,000,000 Btu/hr	Water Injection ⁽¹⁾		
EU-8A/H	Boiler No. 8A/H North American Model No. 3250P (to Stack No. 8A)	10,500,000 Btu/hr			
EU-9A/H	Boiler No. 9A/H Cleaver Brooks Model No. WT600X-62 (to Stack No. 8A)	38,300,000 Btu/hr	None		
EU-SD	<u>Diesel Engine</u> Detroit Diesel Model No. 7123-7000 (to EG Stack)	4,300,000 Btu/hr			

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	Table 1 (continued)				
Emission Unit (EU)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)		
	Cold Cleaning Degreaser				
EU-DG1	Safety Kleen Model 11				
	(to g.v.)	< 100 gallons/month of	None		
	Cold Cleaning Degreaser	solvent (each degreaser)	None		
EU-DG2	Safety Kleen Model 44				
	(to g.v.)				

Table 1 Notes:

(1) Water injection used on a discretionary basis – generally not needed to achieve NO_x compliance.

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3. <u>IDENTIFICATION OF EXEMPT ACTIVITIES</u>

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table 2	
Description of Current Exempt Activities	Reason
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the permittee to reflect changes at the facility over the permit term. An up-to-date copy of the exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00, Appendix C(5)(h)

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4. APPLICABLE REQUIREMENTS

A. <u>EMISSION LIMITS AND RESTRICTIONS</u>

The permittee is subject to the emission limits/restrictions as contained in Table 3 below:

	Table 3									
Emission Unit (EU)	Fuel	Pollutant	Emission Limit/Standard	Applicable Regulations and/or Approval No.						
		SO ₂	See <u>Special Terms and Conditions</u> , Section 5, Proviso D	40 CFR 73						
		Sulfur in	No. 2 Fuel Oil: 0.17 lb S/MMBtu (heat input, HHV)	310 CMR 7.05(1)(a)2						
		Fuel	No. 6 Fuel Oil: 1.21 lb S/MMBtu (heat input, HHV)	MassDEP approval letter dated August 17, 1978						
		PM	0.12 lb/MMBtu (heat input, HHV)	310 CMR 7.02(8)(d)						
	No. 2 or No. 6 Fuel Oil		488 tons/12-month rolling period	Approval No. 4B03021						
EU-8			0.28 lb/MMBtu (heat input, HHV) ⁽⁵⁾	310 CMR 7.19(4)(a)3.b						
			Startup/Shutdown: 111.4 lb/hr (See Special Terms and Conditions, Section 5, Proviso C.1)	Approval No. 4B03021						
				272 tons/12-month rolling period	Approval No. 4B03021					
								СО	200 ppmvd @ 3% O ₂ ⁽⁵⁾	310 CMR 7.19(4)(f)
									Startup/Shutdown: 71.1 lb/hr (See Special Terms and Conditions, Section 5, Proviso C.1)	Approval No. 4B03021
	Natural Gas	Natural Gas	SO ₂	See <u>Special Terms and Conditions</u> , Section 5, Proviso D	40 CFR 73					
EU-9	or No. 6 Fuel Oil	Sulfur in Fuel	No. 6 Fuel Oil: 1.21 lb S/MMBtu (heat input, HHV)	MassDEP approval letter dated August 17, 1978						

	Table 3 (continued)							
Emission Unit (EU)	Fuel	Pollutant	Emission Limit/Standard	Applicable Regulations and/or Approval No.				
		PM	0.12 lb/MMBtu (heat input, HHV)	310 CMR 7.02(8)(d)				
			1,268 tons/12-month rolling period	Approval No. 4B03021				
			0.28 lb/MMBtu (heat input, HHV) ⁽⁵⁾	310 CMR 7.19(4)(a)3.b				
EU-9	Natural Gas or No. 6 Fuel Oil		Startup/Shutdown: 289.5 lb/hr (See Special Terms and Conditions, Section 5, Proviso C.1)	Approval No. 4B03021				
			707 tons/12-month rolling period	Approval No. 4B03021				
		or No. 6 Fuel	СО	200 ppmvd @ 3% O ₂ ⁽⁵⁾	310 CMR 7.19(4)(f)			
			or No. 6 Fuel	or No. 6 Fuel	or No. 6 Fuel	or No. 6 Fuel		Startup/Shutdown: 161.3 lb/hr (See Special Terms and Conditions, Section 5, Proviso C.1)
EU-8 EU-9		NO _x	As of the allowance deadline for a control period, the owners and operators of each CAIR NO _x Ozone Season source and each CAIR CAIR NO _x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO _x Ozone Season allowances available for compliance deductions for the control period under 310 CMR 7.32(6)(e)1. in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO _x Ozone Season units at the source, as determined in accordance with 310 CMR 7.32(8).	310 CMR 7.32				

	Table 3 (continued)				
Emission Unit (EU)	Fuel	Pollutant	Emission Limit/Standard	Applicable Regulations and/or Approval No.	
			Total Halogens: ≤ 4,000 ppm		
			PCBs: < 50 ppm		
			S: 0.55 lb/MMBtu (heat input, HHV)		
		Total Halogens	As: ≤ 5 ppm	Approval No. 4B87036 (as	
	0	PCBs, S,	Cd: ≤ 2 ppm	modified 10/18/88)	
EU-8 EU-9	Specification Used Oil	As, Cd, Cr, Pb	Cr: ≤ 10 ppm	310 CMR 7.05(8)	
200	Fuel		Pb: < 100 ppm		
			HHV: ≥ 120,000 Btu/gallon		
			Flash Point: ≥ 100ºF		
		N/A	Maintain and substantiate a minimum combustion efficiency of 99.5 percent	Approval No. 4B87036	
			companient emercine, or core percent	310 CMR 7.04(9)	
		Sulfur in Fuel	0.17 lb/MMBtu (heat input, HHV) (applicable to No. 2 Fuel Oil)	310 CMR 7.05(1)(a)2	
			512 tons/12-month rolling period	Approval No. 4B03021	
	0:1		Natural Gas : 65 ppmvd @ 15% O ₂ ⁽⁵⁾	Approval No. 4B03021 310 CMR	
				7.19(7)(a)2.a	
EU-9A		or No. 2 Fuel	Natural Gas - Startup/Shutdown: 72.0 lb/hr (See <u>Special Terms and Conditions</u> , Section 5, Proviso C.2)	Approval No. 4B03021	
		No. 2 Fuel Oil : 100 ppmvd @ 15% O ₂ ⁽⁵⁾	No. 2 Fuel Oil : 100 ppmvd @ 15% O ₂ ⁽⁵⁾	Approval No. 4B03021	
			310 CMR 7.19(7)(a)2.b		
					No. 2 Fuel Oil - Startup/Shutdown: 114.6 lb/hr (See <u>Special Terms and</u> <u>Conditions</u> , Section 5, Proviso C.2)

	Table 3 (continued)									
Emission Unit (EU)	Fuel	Pollutant	Emission Limit/Standard	Applicable Regulations and/or Approval No.						
			311 tons/12-month rolling period	Approval No. 4B03021						
	Natural Gas		100 ppmvd @ 15% O ₂ ⁽⁵⁾	310 CMR 7.19(7)(a)2.c						
EU-9A	or No. 2 Fuel Oil	со	Natural Gas - Startup/Shutdown: 71.1 lb/hr (See <u>Special Terms and Conditions</u> , Section 5, Proviso C.2)	Approval No.						
			No. 2 Fuel Oil - Startup/Shutdown: 215.0 lb/hr (See <u>Special Terms and</u> <u>Conditions</u> , Section 5, Proviso C.2)	4B03021						
			1,636 tons/12-month rolling period	Approval No. 4B03021						
								NO _x	0.28 lb/MMBtu ⁽¹⁾ (heat input, HHV) ⁽⁵⁾	310 CMR 7.19(4)(a)3.b
EU-9 & 9A ⁽²⁾ (combined	Natural Gas, No. 2 Fuel		Startup/Shutdown: 373.5 lb/hr (See Special Terms and Conditions, Section 5, Proviso C.3)	Approval No. 4B03021						
-cycle operation)			912 tons/12-month rolling period	Approval No. 4B03021						
		со	200 ppmvd ⁽²⁾ @ 3% O ₂ ⁽⁵⁾	310 CMR 7.19(4)(f)						
			Startup/Shutdown: 208.1 lb/hr (See Special Terms and Conditions, Section 5, Proviso C.3)	Approval No. 4B03021						
E11.0A/L	Natural Gas	Sulfur in Fuel	0.17 lb/MMBtu (heat input, HHV) (applicable to No. 2 Fuel Oil)	310 CMR 7.05(1)(a)2						
EU-8A/H	Oil	or No. 2 Fuel PM	0.10 lb/MMBtu (heat input, HHV) (state-only requirement)	310 CMR 7.02(8)(h)						
EU-9A/H	No. 6 Fuel	Sulfur in Fuel	0.55 lb/MMBtu (heat input, HHV)	310 CMR 7.05(1)(a)1						
	Oil	PM	0.12 lb/MMBtu (heat input, HHV)	310 CMR 7.02(8)(d)						
	NO _x (Ani	(Annual boiler tuning)	310 CMR 7.19(6)							
EU-8 EU-9	All Fuels	SO ₂	1.2 lb/MMBtu ⁽³⁾ (heat input, HHV) (state-only requirement)	Approval No. 4B90220						
EU-9A			(State-Only requirement)	310 CMR 7.22(1)						

	Table 3 (continued)					
Emission Unit (EU)	Fuel	Pollutant	Emission Limit/Standard	Applicable Regulations and/or Approval No.		
		Sulfur in Fuel	0.17 lb/MMBtu (heat input, HHV)	310 CMR 7.05(1)(a)2.		
EU-SD	No. 2 Fuel Oil	NO _x	Operation ≤ 300 hours per calendar year, and not operated as a load shaving unit, peaking power production unit, or standby engine in an energy assistance program	See Note (6)		
EU-8 EU-9 EU-9A EU-8A/H EU-9A/H EU-SD		Smoke	Not to equal or exceed No. 1 of the Chart ⁽⁴⁾ for a period or aggregate period in excess of 6 minutes during any one hour, at no time during the 6 minutes to equal or exceed No. 2 of the Chart	310 CMR 7.06(1)(a)		
	All Fuels	Opacity	≤ 20%, except > 20% to ≤ 40% for ≤ 2 minutes during any 1 hour, at no time during the 2 minutes to exceed 40%, exclusive of uncombined water or smoke subject to 310 CMR 7.06(1)(a)	310 CMR 7.06(1)(b)		
EU-DG1 EU-DG2			< 100 gallons/month of solvent (each unit)	310 CMR 7.03(8)		
		N/A	VOC	The solvent used shall have a vapor pressure that does not exceed 1.0 mm Hg measured at 20°C	310 CMR 7.18(8)(a)	

Table 3 Notes:

- (1) **Combined-cycle operation**, during which NO_x emissions are based on the combined heat input rates of Emission Units No. 9 and 9A and the emission limit of 0.28 lb/MMBtu.
- (2) **Combined-cycle operation**, during which CO emissions are based on the combined heat input rates of Emission Units No. 9 and 9A and the emission limit of 200 ppmvd @ 3% O₂.
- (3) Facility compound emission rate annual calendar average, pursuant to Approval No. 4B90220.
- (4) The Ringlemann Scale for the for grading the density of smoke, as published by the U.S. Bureau of Mines Information Circular No. 8333, or any smoke inspection guide approved by MassDEP.
- (5) Emission limit is based on a calendar day average from CEMS data.
- (6) The permittee requested incorporation of the 300 hour per year limit by letter dated July 30, 2003, to include the provisos that the engine will not be operated as a load shaving unit, peaking power production unit, or standby engine in an energy assistance program; thus rendering the unit exempt from NO_x RACT applicability.

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B. <u>COMPLIANCE DEMONSTRATION</u>

The permittee is subject to the monitoring, testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10), as well as applicable requirements contained in Table 3:

	Table 4				
Emission Unit (EU)	Monitoring/Testing Requirements				
EU-8	In accordance with 40 CFR 72 (the Acid Rain Program), monitor flue gas volumetric flow with a CEMS flow monitoring system pursuant to 40 CFR 75 and use the procedures contained therein to gather and analyze data, and provide quality assurance and quality control.				
	In accordance with Approval No. 4B87036, when firing specification used oil fuel, a minimum combustion efficiency of 99.5% shall be achieved and substantiated annually. The asburned specification used oil fuel shall be tested quarterly or as blended with virgin oil to demonstrate compliance with standards set forth in 310 CMR 7.05(8). Quarterly sampling and testing of used or unused oil collected on-site is only required in quarters in which such oil is combusted on-site. (state-only requirement).				
	In accordance with 310 CMR 7.32, monitor and test as required by the Massachusetts Clean Air Interstate Rule (CAIR). The permittee has submitted an application, under Transmittal No. W154955, in accordance with 310 CMR 7.32 and shall modify this Operating Permit upon approval of the application.				
	In accordance with Approval No. 4B03021 and 310 CMR 7.19(13)(d)5 and (d)6, monitor the nitrogen content of each new shipment of No. 6 fuel oil received by one of the following methods:				
EU-8 EU-9	(1) Monitor through obtaining a certification from the fuel oil supplier that includes the following information:				
	(a) the name of the oil supplier;				
	 (b) the nitrogen content of each oil shipment (acceptable test methods for determining nitrogen content are ASTM Methods D3228 and D4629 or any other method approved by MassDEP and EPA); and, 				
	(c) the location where the sample was drawn for analysis to determine the nitrogen content of the oil, specifically including whether the oil was sampled as delivered to the affected facility or whether the sample was drawn from oil in storage at the oil supplier's or oil refiners facility or another location;				
	(2) As an alternative to Item No. (1) above, sample and analyze the residual oil immediately after the fuel tanks is filled and before any oil is combusted for each new shipment according to methods approved by MassDEP.				
EU-9 EU-9A	In accordance with 40 CFR 72 (the Acid Rain Program), monitor natural gas and No. 2 and No. 6 fuel oil flow rates using fuel meters certified in accordance with 40 CFR 75, Appendix D, and use the procedures contained in 40 CFR 75, Appendix D to gather and analyze fuel flow data, and provide quality assurance for the EU-9/EU-9A fuel meters.				

	Table 4 (continued)				
Emission Unit (EU)	Monitoring/Testing Requirements				
	In accordance with 40 CFR 72 (the Acid Rain Program) and 310 CMR 7.19(13)(a)1, monitor NO _x emissions pursuant to 40 CFR 75 and use the procedures contained therein to gather and analyze data, and provide quality assurance and quality control in order to determine compliance with 310 CMR 7.19, except that the missing data routine and bias adjustment factors contained in 40 CFR 75 need not be applied. Compliance with 40 CFR 75 shall constitute compliance with this requirement.				
	In accordance with 310 CMR 7.19(13)(a)1, compliance with CO emission limits/standards shall be demonstrated with continuous emissions monitoring systems (CEMS) as specified in 310 CMR 7.19(13)(b). CO emissions shall be monitored as specified in 310 CMR 7.19(13)(b)1 through 7.19(13)(b)12. Monitor CO emissions with CEMS certified in accordance with the performance specifications contained in 40 CFR 60, Appendix B, and use the procedures contained in 40 CFR 60, Appendix F, as modified in Special Condition VI.5 of Approval No. 4B03021, to comply and to provide quality assurance and quality control.				
	In accordance with 310 CMR 7.14(1) and 40 CFR 72 (the Acid Rain Program), monitor SO ₂ emissions using a monitoring system satisfying the requirements of 40 CFR 75 and use the procedures contained therein to gather and analyze data, and to provide quality assurance and quality control. Compliance with 40 CFR 75 shall constitute compliance with this requirement.				
EU-8 EU-9 EU-9A	In accordance with 310 CMR 7.14(1) and 40 CFR 72 (the Acid Rain Program), measure O_2 or CO_2 in the flue gas with CEMS. The O_2 or CO_2 CEMS shall meet the requirements of 40 CFR 75 in order to convert SO_2 and NO_x continuous emission monitoring data to units of the applicable emission standards as specified in Table 3 of this Operating Permit. Compliance with 40 CFR 75 shall constitute compliance with this requirement.				
	In accordance with 310 CMR 7.14(1), 40 CFR 72 (the Acid Rain Program), and 40 CFR 75, monitor opacity utilizing continuous opacity monitoring systems (COMS) to provide reasonable assurance of compliance with opacity standards. The opacity COMS shall meet Performance Specification 1 of 40 CFR 60, Appendix B. Compliance with 40 CFR 75 shall constitute compliance with this requirement.				
	In accordance with Approval No. 4B03021, comply with the NO_x and CO emission monitoring requirements contained in all applicable sections of 310 CMR 7.19(13), including 7.19(13)(b).				
	In accordance with Approval No. 4B03021, the continuous emission monitoring system (CEMS) shall consist of two separate sampling trains, one to service Emission Unit No. 8 and one to service Emission Units No. 9 and 9A. The CEMS on Emission Unit No. 8 shall have systems to measure SO ₂ , NO _x , CO ₂ , CO, opacity, and flow. The CEMS on Emission Units No. 9 and 9A shall have systems to measure SO ₂ , NO _x , CO ₂ , CO, and opacity. The CEMS shall operate on the dilution principle. Each sampling train shall have its own controller (PLC) unit and computer-based data processing and management software, which make up the data acquisition and handling system (DAHS). The DAHS performs the data validation, reduction, editing, and reporting functions for the CEMS. All stack monitor locations shall conform with 40 CFR 60, Appendix B; and 40 CFR 75, Appendix A performance specifications and all CEMS processing shall conform to the requirements of 40 CFR 75.				

Table 4 (continued)				
Emission Unit (EU)	Monitoring/Testing Requirements			
EU-8 EU-9 EU-9A	In accordance with the requirements of 310 CMR 7.04(2)(a), the stack shall be equipped with a smoke density sensing instrument and recorder which are properly maintained in an accurate operating condition, and which operate continuously and are equipped with an audible alarm to signal the need for combustion equipment adjustment or repair when the smoke density is equal to or greater than No. 1 of the Chart. Such smoke density equipment shall be available for inspection at reasonable times by a representative of MassDEP.			
	In accordance with Approval No. 4B90220, compliance with 310 CMR 7.22 (Massachusetts Acid Rain Law) shall be demonstrated through monitoring the quantity of each fuel burned (gallons or cubic feet), the average heating value (Btu per gallon or Btu per cubic foot) of each fuel burned, and the sulfur content (pounds per million Btu and percent by weight) of each fuel burned. (state-only requirement).			
	In accordance with Approval No. 4B03021, the permittee shall, upon request from Mass-DEP, perform stack testing on Emission Units No. 8, 9, and 9A to demonstrate compliance with 310 CMR 7.19(4) and 310 CMR 7.19(7), in concert with the requirements of 310 CMR 7.19(13). Stack testing shall be conducted in accordance with the appropriate EPA test methods, as contained in 40 CFR 60.			
	In accordance with Approval No. 4B03021, conform with 40 CFR 75, Appendix B guidelines in the performance of Relative Accuracy Test Audit (RATA) and Linearity/Cylinder Gas Audit (CGA) testing for NO _x , and CO ₂ , and conform with 40 CFR 60, Appendix F and Special Condition VI.5, guidelines in the performance of Relative Accuracy Test Audit (RATA) and Cylinder Gas Audit (CGA) testing for CO under NO _x RACT.			
EU-8 EU-9 EU-8A/H EU-9A/H	In accordance with 310 CMR 7.04(4)(a), inspect and maintain each fuel utilization facility in accordance with the appropriate manufacturer's recommendations, and test for efficient operation at least once in each calendar year. The results of said inspection, maintenance and testing, and the date upon which it was performed shall be recorded and posted conspicuously on or near the permitted facility.			
EU 04/U	As required by 310 CMR 7.19(6)(a), the boiler shall be tuned annually following the procedure outlined in 310 CMR 7.19(6)(a)1 though 12, and incorporated herein by reference.			
EU-9A/H	In accordance with 310 CMR 7.19(6)(b)2.g., verify at least once per month that the settings determined during the annual tune-up have not changed.			
EU-SD	Monitor monthly hours of operation to ensure the allowable 300 hours per calendar year limit is not exceeded.			
EU-DG1	In accordance with 310 CMR 7.03(8), monitor the amount of solvent added to each cold cleaning degreaser on a monthly basis.			
EU-DG2	In accordance with 310 CMR 7.18(8)(h), testing shall be performed to demonstrate compliance if requested by MassDEP.			

	Table 4 (continued)		
Emission Unit (EU)	Monitoring/Testing Requirements		
	, ,		
	(c) to be in the presence of a representative of MassDEP when such is deemed necessary, andto be summarized and submitted to MassDEP with analyses and report within such time as agreed to in the approved test protocol.		
	Monitor operations such that information may be compiled for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.		

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In accordance with 310 CMR 7.00, Appendix C(10)(b), the permittee shall maintain onsite the following records for 5 years from the date of generation, and these records shall be readily available to MassDEP and/or U.S. EPA personnel.

	Table 5	
Emission Unit (EU)	Record Keeping Requirements	
EU-8	Record, on a continuous basis, flue gas volumetric flow in accordance with the requirements of 40 CFR 75.	
	In accordance with Approval No. 4B87036, maintain records of specification used oil fuel firing and testing to enable annual notification to MassDEP of the quantity of specification used oil fuel fired, to substantiate a minimum combustion efficiency 99.5%, and to report on the quarterly testing of oil to demonstrate compliance with the standards set forth in 310 CMR 7.05(8). (state-only requirement).	
EU-8 EU-9	In accordance with Approval No. 4B01050, comply with all applicable recordkeeping requirements contained in 40 CFR 60, 40 CFR 72, and 40 CFR 75.	
	In accordance with 310 CMR 7.32, maintain records as required by the Massachusetts Clean Air Interstate Rule (CAIR). The permittee has submitted an application, under Transmittal No. W154955, in accordance with 310 CMR 7.32 and shall modify this Operating Permit upon approval of the application.	
	Record, on a continuous basis, emissions of NO_x in accordance with the requirements of 310 CMR 7.19(13)(a)1 and 40 CFR 75.	
	Record, on a continuous basis, emissions of CO in accordance with the requirements of 310 CMR 7.19(13)(b)1 through (b)12; 40 CFR 60, Appendix B; and 40 CFR 60, Appendix F.	
	Record, on a continuous basis, emissions of SO ₂ in accordance with the requirements of 40 CFR 75.	
	Record, on a continuous basis, opacity in accordance with the requirements of 40 CFR 75 and 40 CFR 60, Appendix B.	
EU-8 EU-9 EU-9A	In accordance with 310 CMR 7.22 and Approval No. 4B90220, keep records for each fuel utilization facility that is part of the Acid Rain Control Plan including; the quantity of each fuel burned (gallons, tons, or cubic feet); the sulfur content (pounds per million Btu and percent by weight); and the average heating value (Btu per gallon, ton, or cubic feet) of each fuel burned. The records must be maintained on-site for a minimum of five (5) years and must be made available to MassDEP for inspection upon request. (state-only requirement).	
	In accordance with Approval No. 4B03021, comply with the NO_x and CO emission record-keeping requirements contained in all applicable sections of 310 CMR 7.19(13), including 7.19(13)(b) and 7.19(13)(d).	
	Maintain records of smoke density indicator recording charts required by 310 CMR 7.04(2)(a) or COMS records required by 40 CFR 75 and 40 CFR 60, Appendix B.	
	In accordance with 310 CMR 7.19(13)(d)3, record for each unit on a daily basis the type(s) of fuel burned, heat content of each fuel, total heating value of the fuel consumed, actual emission rate (for emission units demonstrating compliance with CEMS), and allowable emission rate for CO and NO _x .	

	Table 5 (continued)		
Emission Unit (EU)	Record Keeping Requirements		
	In accordance with 310 CMR 7.00, Appendix C(9)(b)2, maintain SO ₂ CEMS records or fuel analysis results used to demonstrate compliance with fuel sulfur content requirements.		
	In accordance with 310 CMR 7.19(13)(d)7, maintain records of the nitrogen content of each new shipment of No. 6 fuel oil received. Such records shall include fuel analysis results and/or fuel oil supplier certifications that include the name of the fuel oil supplier and the location where the sample was drawn for analysis to determine the nitrogen content.		
	In accordance with 310 CMR 7.19(13)(d)1, maintain a record of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS.		
	In accordance with 310 CMR 7.19(13)(d)8, all records required by 310 CMR 7.19(13)(d), including computer retained and generated data, shall be kept in a permanently bound log book or other form acceptable to MassDEP.		
	In accordance with Approval No. 4B03021, maintain records to determine the amount of daily NO_x and/or CO emissions in excess of allowable limits requiring offsets by Emission Reduction Credits (ERCs).		
EU-9 EU-9A	Record, on a continuous basis, natural gas, No. 2 fuel oil, and No. 6 fuel oil flow rates in accordance with the requirements of 40 CFR 75.		
EU-8 EU-9 EU-8A/H EU-9A/H	The results of the annual inspection of the fuel utilization facility conducted in accordance with 310 CMR 7.04(4)(a) shall certify that the facility has been inspected and maintained in accordance with manufacturer's recommendations and tested for efficient operation at least once in each calendar year, and shall be posted conspicuously on or near the facility indicating the date on which the inspection was performed.		
	In accordance with 310 CMR 7.19(6)(b)2, maintain records of the boilers' annual tune-up to include:		
	(a) date of tune-up,		
	(b) person(s) conducting the tune-up,		
ELL 04/L	(c) CO (for natural gas) or O ₂ /smoke spot (for oil) correlations obtained during tune-up,		
EU-9A/H	(d) boiler/burner manufacturers' recommended set-points,		
	(e) final boiler set-points as a result of tune-up,		
	(f) normal boiler/burner maintenance records, and		
	(g) at least once per month verification that the settings determined during tune-up have not changed.		
EU-SD	Compile, on a monthly basis, cumulative hours of operation to produce hours of operation per calendar year. (This Emission Unit shall not exceed 300 hours of operation per calendar year).		

	Table 5 (continued)		
Emission Unit (EU)	Record Keeping Requirements		
	In accordance with 310 CMR 7.03(8), maintain records of the amount of solvent added to each cold cleaning degreaser on a monthly basis.		
	In accordance with 310 CMR 7.18(8)(g), prepare and maintain daily records sufficient to demonstrate continuous compliance with 310 CMR 7.18(8). Such records shall include, but are not limited to:		
EU-DG1 EU-DG2	identity, quantity, formulation and density of solvent(s) used;		
E0-DG2	2. quantity, formulation, and density of all waste solvent(s) generated.		
	3. actual operational and performance characteristics of the degreaser and any appurtenant emissions and control equipment, if available; and		
	4. any other requirements specified by MassDEP in any approval(s) and/or order(s) issued to the person.		
Facility-	Maintain fuel oil purchase receipts necessary in order to demonstrate compliance with the fuel sulfur content requirements as provided in 310 CMR 7.05(1)(a).		
	Maintain records of facility operations such that information may be reported as required for compliance with 310 CMR 7.12. Keep copies of all information supplied to MassDEP pursuant to 310 CMR 7.12 on-site for 5 years after the date the report is submitted. Maintain copies of Source Registration/Emission Statement forms submitted annually to MassDEP as required pursuant to 310 CMR 7.12(3)(b).		
	In accordance with 310 CMR 7.00, Appendix C(10), maintain records of all monitoring data and supporting information on-site for a period of at least 5 years from the date of the monitoring sample to include at a minimum, all calibration and maintenance records and copies of all reports required by the Operating Permit, and any other information required to interpret the monitoring data. Records required to be maintained shall include:		
Wide	(a) The date, place as defined in the permit, and time of sampling or measurements.		
	(b) The date(s) analyses were performed.		
	(c) The company or entity that performed the analyses.		
	(d) The analytical techniques or methods used.		
	(e) The results of such analyses.		
	(f) The operating conditions as existing at the time of sampling or measurement.		
	These records shall be readily available to MassDEP and/or U.S. EPA personnel.		
	Maintain records required by 40 CFR 75, Subpart F.		

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Table 5 (continued)		
Emission Unit (EU)	Record Keeping Requirements	
	Maintain the test results of any stack testing performed in accordance with 310 CMR 7.13(1) or of any other testing or testing methodology required by MassDEP or U.S. EPA.	
	In accordance with 310 CMR 7.00, Appendix C(10)(b), maintain records of all monitoring data and supporting information required by this Operating Permit onsite for five (5) years from the date of the monitoring sample, measurement, report, or initial Operating Permit application.	

	Table 6		
Emission Unit (EU)	Reporting Requirements ⁽¹⁾		
EU-8 EU-9	In accordance with Approval No. 4B87036, the specification used oil fuel shall be tested quarterly or as blended with virgin oil to demonstrate compliance with the standards set forth in 310 CMR 7.05(8). Results of the quarterly testing shall be submitted annually to Mass-DEP. Quarterly sampling and testing of used or unused oil collected on-site is only required in quarters in which such oil is combusted on-site. (state-only requirement).		
	In accordance with Approval No. 4B01050, comply with all applicable reporting requirements contained in 40 CFR 60, 40 CFR 72, and 40 CFR 75.		
	In accordance with 310 CMR 7.32, submit reports as required by the Massachusetts Clean Air Interstate Rule (CAIR). The permittee has submitted an application, under Transmittal No. W154955, in accordance with 310 CMR 7.32 and shall modify this Operating Permit upon approval of the application.		
	Notification of QA testing is required for Relative Accuracy Test Audits (RATAs) and Appendix E/LME (Low Mass Emission) unit tests. Notification must be made at least 21 days prior to the scheduled test date to EPA as required by 40 CFR 75.61; to the MassDEP Boston Office at Massachusetts Department of Environmental Protection, One Winter Street, Boston, MA 02108, Attn: Patricio Silva; and to the DEP Regional Office, Attn: BWP Permit Chief. If tests must be rescheduled, 24 hours notice must be given, as specified in 40 CFR 75.61(a)(5).		
	A previously approved RATA protocol may be referenced at the time of test notification provided that the referenced protocol was completed in accordance with current 40 CFR 75 procedures, addresses all previous MassDEP protocol comments to the satisfaction of the MassDEP, and none of the information has changed. If a revised protocol must be submitted, it must be submitted at least 21 days prior to the scheduled test date.		
	A hard copy of the QA RATA or Appendix E/LME test results must be submitted to both the MassDEP Boston and MassDEP Regional Offices within 45 days of completion of tests. The electronic results must be submitted in the quarterly electronic data report (EDR).		
	Results from QA daily calibrations and quarterly linearity checks must be reported electronically in the EDR submittal for the quarter in which the testing occurs.		
EU-8 EU-9 EU-9A	In accordance with Approval No. 4B03021, comply with the NO_x and CO reporting requirements contained in all applicable sections of 310 CMR 7.19(13), including 7.19(13)(b) and 7.19(13)(d).		

Note:

1. The annual Source Registration/Emission Statement shall be submitted to the DEP Office specified in the instructions. All other reports, including both 6-month summary reports, are to be submitted to the Southeast Regional Office address, as specified on the letterhead of this Operating Permit.

	Table 6 (continued)		
Emission Unit (EU)	Reporting Requirements ⁽¹⁾		
EU-8 EU-9 EU-9A	In accordance with 310 CMR 7.14(1) and 310 CMR 7.19(13)(d)2, submit CEMS Excess Emissions Reports for each calendar quarter by the thirtieth (30 th) day of April, July, October, and January covering the previous calendar periods of January through March, April through June, July through September, and October through December, respectively. Such report shall identify any excess emissions as measured by a CEMS within the previous calendar quarter with respect to the emission limits/standards contained in Table 3. Start-up periods shall be reported in accordance with The Department response to Comments on Proposed Amendments to 310 CMR 7.00: RACT for NO _x , dated June 1994. Start-up periods are not included in the calendar day NO _x and CO emission rate compliance averaging time as long as the mass emission rate in pounds of NO _x and/or CO per hour, from the emission unit does not exceed the mass emission rate that would occur at the maximum firing rate. In the event none of the above items have occurred, such information shall be stated in the report.		
	In accordance with 310 CMR 7.19(13)(d)9, submit compliance records within ten (10) days of written request by MassDEP or U.S. EPA.		
	In accordance with 310 CMR 7.22 and Approval No. 4B90220, submit annual reports by January 15 th containing the following information:		
	(a) The quantity of each fuel burned (gallons, tons, or cubic feet).		
	(b) The sulfur content (pounds per million Btu and percent by weight).		
	(c) The average heating value (Btu per gallon, ton, or cubic feet).		
	The report will summarize monthly data for the previous calendar year. The records must be maintained onsite for a minimum of five (5) years and must be available to MassDEP for inspection upon request. (state-only requirement).		
	Submit emissions compliance testing (stack testing) reports in accordance with 310 CMR 7.19(13)(c), if required.		
Facility- Wide	In accordance with 310 CMR 7.12(2)(a)1., the permittee will submit annually an emission statement/source registration.		

Note:

1. The annual Source Registration/Emission Statement shall be submitted to the DEP Office specified in the instructions. All other reports, including both 6-month summary reports, are to be submitted to the Southeast Regional Office address, as specified on the letterhead of this Operating Permit.

Table 6 (continued)			
Emission Unit (EU)	Reporting Requirements ⁽¹⁾		
Facility- Wide	In accordance with 310 CMR 7.00, Appendix C(10)(f), report to MassDEP all instances of deviations from permit requirements. This report shall include the deviation itself, including those attributable to upset conditions as defined in the permit, the probable cause of the deviation, and any corrective actions or preventive measures taken.		
	All notifications and reporting required in accordance with Section No. 25 of this Operating Permit shall be sent directly to:		
	Department of Environmental Protection Bureau of Waste Prevention Southeast Regional Office 20 Riverside Drive Lakeville, MA 02347		
	ATTN: Chief, Permit Section		
	Telephone: (508) 946-2779 Fax: (508) 947-6557		
	In accordance with 310 CMR 7.00, Appendix C(10)(c), report a summary of all monitoring data and related supporting information to MassDEP every six months (January 30 th and July 30 th) of each calendar year.		
	In accordance with 310 CMR 7.13(1) and 7.13(2), the permittee, if determined by MassDEP that stack testing is necessary to ascertain compliance with MassDEP regulations, shall cause such stack testing to be summarized and submitted to MassDEP as prescribed in the agreed-to test protocol.		
	In accordance with 310 CMR 7.00, Appendix C(10)(a), the permittee, upon MassDEP's request shall transmit any record relevant to the Operating Permit within 30 days of the request by MassDEP or within a longer time period if approved in writing by MassDEP. The record shall be transmitted on paper, on computer disk, or electronically at the discretion of MassDEP.		
	All required reports must be certified by a responsible official as provided in 310 CMR 7.00, Appendix C(10)(h).		

Note:

1. The annual Source Registration/Emission Statement shall be submitted to the DEP Office specified in the instructions. All other reports, including both 6-month summary reports, are to be submitted to the Southeast Regional Office address, as specified on the letterhead of this Operating Permit.

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C. GENERAL APPLICABLE REQUIREMENTS

The permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et. seq. and 310 CMR 8.00 et. seq., when subject.

D. <u>REQUIREMENTS NOT CURRENTLY APPLICABLE</u>

The permittee shall comply with any applicable requirements that become effective during the permit term.

The permittee is currently not subject to the following requirements:

Table 7		
Regulation	Description	
310 CMR 7.16	Reduction of Single Occupant Commuter Vehicle Use	
310 CMR 7.27	Superseded by 310 CMR 7.28 and 310 CMR 7.32	
310 CMR 7.28	As of January 1, 2009, this regulation is no longer applicable; it was superseded by 310 CMR 7.32	
42 USC 7401, §112	Hazardous Air Pollutants	
42 USC 7401, §112(r)(7)	Accidental Release Prevention Requirements: Risk Management under the Clean Air Act §112(r)	
42 USC 7401, §601	Stratospheric Ozone	
40 CFR 64	Compliance Assurance Monitoring (CAM)	

5. SPECIAL TERMS AND CONDITIONS

The permittee is subject to the following special provisions that are not contained in Tables 3, 4, 5 and 6.

A. In accordance with Approval No. SM73-043-CO, Emission Unit No. 8 shall continue to emit through a single stack having the following parameters:

Stack No. 8
Stack Height 187 feet
Stack Exit Diameter 81 inches

Stack Material Steel with gunite lining

B. In accordance with Approval No. SM73-043-CO, Emission Units No. 9 and 9A shall continue to emit through a single stack having the following parameters:

Stack No.

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Stack Height 187 feet Stack Exit Diameter 120 inches

Stack Material Steel with gunite lining

- C. In accordance with Approval No. 4B03021 (NO_x RACT Emission Control Plan (ECP)), NO_x RACT compliance shall be determined, in part, in accordance with the procedures described below:
 - 1. Emission Units No. 8 and 9
 - (a) <u>Cold Startup Conditions</u> **Cold startup** is defined as any startup transition that occurs more than 72 hours after any previous shutdown. The permittee will have a **cold startup allowance** of 360 minutes after the introduction of fuel to Emission Unit No. 8 and/or Emission Unit No. 9.
 - (b) Warm Startup Conditions Warm startup is defined as any startup transition that occurs less than 72 hours after any previous shutdown.

 The permittee will have a warm startup allowance of 240 minutes after the introduction of fuel to Emission Unit No. 8 and/or Emission Unit No. 9.
 - (c) Shutdown Conditions
 - (i) Emission Unit No. 8 Any 60-minute period prior to the termination of firing fuel in the Emission Unit No. 8 boiler.
 - (ii) Emission Unit No. 9 Any 60-minute period prior to the Emission Unit No. 9 steam turbine/generator being taken off line (MW=0).
 - 2. <u>Emission Unit No. 9A (Simple-Cycle Operation)</u>
 - (a) <u>Startup Conditions</u> **Startup** is defined as any startup transition that occurs on Emission Unit No. 9A while operating in the simple-cycle mode. The permittee will have a **startup allowance** of 60 minutes after the introduction of fuel to the Emission Unit No. 9A combustion turbine.
 - (b) <u>Shutdown Conditions</u> **Shutdown** is defined as the 60-minute period prior to the termination of firing fuel in the Emission Unit No. 9A combustion turbine.
 - 3. Emission Unit Nos. 9 and 9A (Combined-Cycle Operation)
 - (a) <u>Cold Startup Conditions</u> **Cold startup** is defined as any startup transition that occurs more than 72 hours after any previous shutdown. The permittee will have a **cold startup allowance** of 360 minutes after the introduction of fuel to the Emission Unit No. 9 boiler and/or the

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Emission Unit No. 9A combustion turbine.

- (b) Warm Startup Conditions Warm startup is defined as any startup transition that occurs less than 72 hours after any previous shutdown.

 The permitee will have a warm startup allowance of 240 minutes after the introduction of fuel to the Emission Unit No. 9 boiler and/or the Emission Unit No. 9A combustion turbine.
- (c) <u>Shutdown Conditions</u> Any 60-minute period prior to the Emission Unit No. 9 steam turbine/generator being taken off line (MW=0).

(<u>Note</u>: The averaging time for determining compliance with the maximum allowable emission rates identified in Table 3 shall be based on a block average of the appropriate startup/shutdown time period, in hours, and shall be expressed in terms of pounds of emissions per hour.)

D. Federal Acid Rain Program: Phase II Acid Rain Permit

Cleary-Flood Station Emission Units No. EU-8 and EU-9 are subject to the requirements of Phase II of the federal Acid Rain Program as defined by EPA in 40 CFR Part 72. Pursuant to 40 CFR 72.71, 40 CFR 72.73, and 310 CMR 7.00, Appendix C(3)(n), MassDEP is the permitting authority for Phase II Acid Rain Permits. MassDEP issued the initial Phase II Acid Rain Permit to Cleary-Flood Station on December 30, 1997 (Approval No. 4B97108), and renewed said permit on February 28, 2003. MassDEP is incorporating the requirements of the renewal Phase II Acid Rain Permit into this Operating Permit. The Phase II Acid Rain requirements will renew in the Operating Permit.

Within 60 days of the end of each calendar year, the facility shall hold in its SO_2 allowance account at least one allowance for each ton of SO_2 emitted during the previous year. An allowance is a limited authorization to emit SO_2 in accordance with the Acid Rain Program.

If the facility has excess emissions in any calendar year, it shall submit a proposed offset plan as required under 40 CFR Part 77. In addition, the permittee shall pay any penalties specified in 40 CFR Part 77and comply with the terms of an approved offset plan.

In accordance with 40 CFR Part 73, the permittee's designated representative may buy, sell, trade, or transfer allowances or between EU accounts at any time, except between 60 days of the end of the calendar year and the completion of the annual SO_2 allowance reconciliation for the preceding year(s).

The yearly allowance allocations as identified in 40 CFR 73, Tables 2, 3, or 4 (as amended) are identified below:

Emission Unit	Calendar Year	
Emission ome	2002-2009	2010 and beyond
8	143	143
9	2679	1577

- E. Emission Unit No. EU-SD shall not exceed 300 hours of operation in any calendar year, in accordance with 310 CMR 7.19(8)(b). In addition, the engine shall not be operated as a load shaving unit, peaking power production unit, or standby engine in an energy assistance program.
- F. In accordance with Approval No. 4B03021 and as allowed under 310 CMR 7.19, the permittee shall use Emission Reduction Credits (ERCs) to offset any actual daily average NO_x and/or CO emissions in excess of allowable emission limits listed herein.

To ensure continuous compliance with the NO_x and CO emission limits contained in this Final Operating Permit for Boiler No. 8, Boiler No. 9, and Combustion Turbine No. 9A, the permittee shall purchase ERCs as provided in 310 CMR 7.00, Appendix B(3), to offset all actual NO_x and/or CO emissions in excess of allowable emission limits. The permittee shall perform daily calculations according to the following equation to determine the quantity of ERCs needed to comply with emission limits:

 $ERC_{NOx/CO}(needed) = (AcE_{NOx/CO} - AlE_{NOx/CO})$

where;

 $AcE_{NOx/CO}$ = actual NO_x or CO emissions in pounds per day

 $AlE_{NOx/CO}$ = allowable NO_x or CO emissions in pounds per day

 $ERC_{NOx/CO}$ (needed) = the daily quantity of federally-enforceable ERCs from sources of NO_x or CO emissions, certified by MassDEP under 310 CMR 7.00, Appendix B(3), which must be purchased by TMLP

Calculated ERC_{NOx/CO}(needed) shall be rounded up to the nearest ton.

In accordance with 310 CMR 7.00, Appendix B(3)(e)8, ERCs generated by the control of ozone precursors during the period May 1 - September 30 can be used at any time during the calendar year. ERCs generated by control of ozone precursors during the period October 1 through April 30, can only be used in the same season as generated (October 1 through April 30).

G. Massachusetts Clear Air Interstate Rule (MassCAIR); 310 CMR 7.32

The owner/operator of Taunton Municipal Lighting Plant, Cleary-Flood Station, is subject to and shall comply with the Massachusetts Clean Air Interstate Rule (CAIR), 310

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CMR 7.32, and has submitted a CAIR emission control application pursuant to 310 CMR 7.32(3).

6. <u>ALTERNATIVE OPERATING SCENARIOS</u>

The permittee did not request alternative operating scenarios in its operating permit application.

7. EMISSIONS TRADING

(a) <u>Intra-Facility Emission Trading</u>

Pursuant to 310 CMR 7.00, Appendix C(7)(b), emission trades, provided for in this permit, may be implemented provided the permittee notifies the United States Environmental Agency (EPA) and MassDEP at least fifteen (15) days in advance of the proposed changes and the permittee provides the information required in 310 CMR 7.00, Appendix C(7)(b)3.

Any intra-facility change that does not qualify pursuant to 310 CMR 7.00, Appendix C(7)(b)2 is required to be submitted to MassDEP pursuant to 310 CMR 7.00, Appendix B.

(b) Inter-Facility Emission Trading

All increases in emissions due to emission trading, must be authorized under the applicable requirements of 310 CMR 7.00, Appendix B (the "Emissions Trading Program") and the 42 U.S.C. §7401 et seq. (the "Act") and provided for in this permit.

8. COMPLIANCE SCHEDULE

The permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the permittee shall comply with any applicable requirements that become effective during the permit term.

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GENERAL CONDITIONS FOR OPERATING PERMIT

9. <u>FEES</u>

The permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

10. <u>COMPLIANCE CERTIFICATION</u>

All documents submitted to MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the permittee via MassDEP's web site,

http://www.mass.gov/dep/air/approvals/aqforms.htm#op

(a) Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this permit. The report shall be postmarked or delivered by January 30 to MassDEP and to the Regional Administrator, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification report shall describe:

- (I) the terms and conditions of the permit that are the basis of the certification;
- (ii) the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- (iii) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and,
- (iv) any additional information required by MassDEP to determine the compliance status of the source.

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(b) Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this permit. The report shall be postmarked or delivered January 30 and July 30 to MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- (i) the terms and conditions of the permit that are the basis of the certification;
- (ii) the current compliance status during the reporting period;
- (iii) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- (iv) whether there were any deviations during the reporting period;
- (v) if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- (vi) whether deviations in the reporting period were previously reported;
- (vii) if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- (viii) if the deviations in the reporting period have returned to compliance and the date of such return to compliance; and,
- (ix) any additional information required by MassDEP to determine the compliance status of the source.

11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act and is grounds for enforcement action, for permit termination or revocation; or for denial of an operating permit renewal application by MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00 and civil penalties under M.G.L. c.111, §142A and 142B. This permit does not relieve the permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this permit.

12. PERMIT SHIELD

(a) This facility has a permit shield provided that it operates in compliance with the terms and conditions of this permit. Compliance with the terms and conditions of this permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the permittee's application and as identified in this permit.

Where there is a conflict between the terms and conditions of this permit and any earlier permit, the terms and conditions of this permit control.

- (b) MassDEP has determined that the permittee is not currently subject to the requirements listed in Section 4, Table 7.
- (c) Nothing in this permit shall alter or affect the following:
 - (i) the liability of the source for any violation of applicable requirements prior to or at the time of permit issuance.
 - (ii) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or,
 - (iii) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

13. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70, and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A.

All other terms and conditions contained in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by MassDEP, EPA and citizens as defined under the Act.

A permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

14. PERMIT TERM

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This permit shall expire on the date specified on the cover page of this permit, which shall not be later than the date five (5) years after the issuance of this permit.

Permit expiration terminates the permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

15. PERMIT RENEWAL

Upon MassDEP's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by MassDEP on the renewal application.

In the event MassDEP has not taken final action on the operating permit renewal application prior to this permit's expiration date, this permit shall remain in effect until MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

16. REOPENING FOR CAUSE

This permit may be modified, revoked, reopened, and reissued, or terminated for cause by Mass-DEP and/or EPA. The responsible official of the facility may request that MassDEP terminate the facility's operating permit for cause. MassDEP will reopen and amend this permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the permittee for an operating permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any operating permit condition.

17. <u>DUTY TO PROVIDE INFORMATION</u>

Upon MassDEP's written request, the permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall furnish to MassDEP copies of records that the permittee is required to retain by this permit.

18. <u>DUTY TO SUPPLEMENT</u>

The permittee, upon becoming aware that any relevant facts were omitted or that incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

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The permittee shall promptly, on discovery, report to MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to MassDEP.

19. TRANSFER OF OWNERSHIP OR OPERATION

This permit is not transferable by the permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, liability between current and new permittee has been submitted to MassDEP.

20. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of MassDEP and EPA to perform the following:

- (a) Enter upon the permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
- (d) sample or monitor at reasonable times, any substances or parameters for the purpose of assuring compliance with the operating permit or applicable requirements as per 310 CMR 7.00 Appendix C.(3)(g)12.

22. PERMIT AVAILABILITY

The permittee shall have available at the facility at all times a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the permit, including any amendments or attachments thereto, upon request by MassDEP or EPA.

23. SEVERABILITY CLAUSE

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The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

24. EMERGENCY CONDITIONS

The permittee shall be shielded from enforcement action brought for noncompliance with technology based⁽¹⁾ emission limitations specified in this permit as a result of an emergency⁽²⁾. In order to use emergency as an affirmative defense to an action brought for noncompliance, the permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (a) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- (b) the permitted facility was at the time being properly operated;
- (c) during the period of the emergency the permittee took all reasonable steps as expeditiously as possible to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and,
- (d) the permittee submitted notice of the emergency to MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/-Emergency Response, immediate notification to the appropriate parties should be made as required by law.

25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to Section 24 of this permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6 of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

⁽¹⁾ Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

⁽²⁾ An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

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The permittee shall report to MassDEP's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone or fax, within three (3) days of discovery of such deviation:

- Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the permit or approval as surrogate for an emission limit.
- Exceedances of permit operational limitations directly correlated to excess emissions.
- Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Waste Prevention Operating Permit Reporting Kit, which is available to the permittee via MassDEP's web site,

http://www.mass.gov/dep/air/approvals/aqforms.htm#op

The report shall include the deviation, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and the corrective actions or preventive measures taken.

Deviations that were reported by telephone of fax within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the Regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations, which do not require 3 day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

26. OPERATIONAL FLEXIBILITY

The permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the permit, and in compliance with all applicable requirements, provided the permittee gives the EPA and MassDEP written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a)

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and will be appended to the facility's permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

27. MODIFICATIONS

- (a) Administrative Amendments The permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).
- (b) <u>Minor Modifications</u> The permittee may make changes at the facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).
- (c) <u>Significant Modifications</u> The permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).
- (d) No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this operating permit. A revision to the permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an operating permit revision under any other applicable requirement.

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28. <u>LEGEND OF ABBREVIATED TERMS IN OPERATING PERMIT</u>

AQ ID Stationary Source Emission Inventory Identification Number

FMF FAC NO. Facility Master File Facility Number

FMF RO NO. Facility Master File Regulated Object Number

EU emission unit

S sulfur

S in Fuel Sulfur content in fuel Btu British thermal units

MMBtu million British thermal units

 $\begin{array}{lll} HHV & & \text{higher heating value} \\ \text{g.v.} & & \text{general ventilation} \\ \text{SO}_2 & & \text{sulfur dioxide} \\ \text{PM} & & \text{particulate matter} \\ \text{NO}_x & & \text{oxides of nitrogen} \\ \text{CO} & & \text{carbon monoxide} \\ \end{array}$

VOC volatile organic compounds

ppm parts per million

< less than

≥ greater than or equal to

MassDEP or

Department Massachusetts Department of Environmental Protection

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APPEAL CONDITIONS FOR OPERATING PERMIT

This permit is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to MassDEP final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the facility shall not be in violation of the Act for operating without a permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts Department of Environmental Protection P.O. Box 4062 Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.